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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,972	10/19/2005	Milan Vasic	5734	8208

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SHOEMAKER AND MATTARE, LTD
10 POST OFFICE ROAD - SUITE 110
SILVER SPRING, MD 20910

EXAMINER	
LEE, SEUNG H	

ART UNIT	PAPER NUMBER
2887	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/553,972	VASIC ET AL.	
	Examiner	Art Unit	
	Seung H. Lee	2887	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23,24,27-39 and 42-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *23,24,27-39 and 42-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Receipt is acknowledged of the response filed on 25 April 2008, which has been entered in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 23, 24, 27-30, 32-39, 42-45, 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alcock et al. (WO 0231780 A2, of the record) in view of Plesko (US 5,932,860)

Re claim 23: Alcock et al. discloses a method for determining the authenticity of an item (see pg. 2 L: 18-23), the item carrying a marking exhibiting a viewing-angle dependent light reflection spectrum, the method comprising steps of a) illuminating said marking with at least a first light source having first spectral characteristics (pg. 4 L: 14-16); b) collecting light reflected by said marking at least at two predefined different observation angles with respect to the plane of the marking, and measuring its respective intensity (see pg. 2 L: 19-23, and pg. 3 L: 8-12); c) optionally storing the measured intensity values of step b) in a permanent digital memory (see pg. 4 L: 17-25 Since calculations are being performed the data taken must be stored for at least that duration of time.); d) illuminating said marking with at least a second light source having

second spectral characteristics (see pg. 4 L: 14-16); e) collecting light reflected by said marking at least at two predefined different observation angles with respect to the plane of the marking, and measuring its respective intensity (see pg. 4 L: 5-8); f) optionally storing the measured intensity values of step e) in a permanent digital memory (see pg. 4 L: 17-25 Since calculations are being performed the data taken must be stored for at least that duration of time.); and g) comparing said measured intensity values of steps b) and e) with previously stored corresponding reference values according to a predefined algorithm, and deriving an authenticity indicator from the comparison result using a pre-established decision criterion (see pg. 4 L: 17-25, and pgs. 6-7); wherein the illumination of steps a) and d) is a wide-angle illumination (see pg. 2 L: 18-25 Since there are more then one light sources they must be at different positions, therefore there would be a wide angle illumination.)

However, Alcock et al. fairly suggest that the a wide-angle illumination was provided using a compound parabolic reflector (CPC).

Plesko teaches a light scanning beam for scanning information bearing target using a compound parabolic concentrators (CPC) (34) (see figs. 1-6; col. 17, lines 34-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Plesko to the teachings of Alcock et al. in order to provide improved scanning device by reducing size of scanning device by using small photo diode which also improving speed of scanning.

Re claim 38: Alcock et al. discloses a device for determining the authenticity of an item (see Fig. 1), carrying a marking exhibiting a viewing-angle dependent light reflection spectrum; said device comprising at least two light sources having different spectral characteristics for providing sequential illumination to said marking (see pg. 4 L: 14-16); at least two photodetectors with optional collection optics for collecting light reflected by said marking at least at two predefined, different observation angles and delivering an electric signal corresponding to the collected light intensity (see pg. 2 L: 19-23, and pg. 3 L: 8-12); analog-to-digital converting, processing, controlling and memory means, for controlling the light sources, digitizing and storing reflected intensity values, for comparing said intensity values with previously stored corresponding reference values, and for deriving an authenticity indicator from the comparison result, all according to a predefined algorithm and using a pre-established decision criterion (see pg. 4 L: 17-25 the computing device serves as the analog-to-digital converter); wherein the device comprises a wide-angle illumination optics for guiding the light of said light sources to said marking(see pg. 2 L: 18-25 Since there are more then one light sources they must be at different positions, therefore there would be a wide angle illumination.)

However, Alcock et al. fairly suggest that the a wide-angle illumination was provided using a compound parabolic reflector (CPC).

Plesko teaches a light scanning beam for scanning information bearing target using a compound parabolic concentrators (CPC) (34) (see figs. 1-6; col. 17, lines 34-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Plesko to the teachings of Alcock et al. in order to provide improved scanning device by reducing size of scanning device by using small photo diode which also improving speed of scanning.

Re claim 24 and 39: Alcock et al. discloses an item that is selected from the group consisting of a security document, a valued good or a packaging (see abstract L: 1-2.)

Re claim 27-28 and 42-43: Alcock et al. discloses at least two predefined observation angles is chosen between 0° and 45°, and a second of said observation angles is chosen between 45° and 90°, with respect to normal to the plane of the marking (see Fig. 4B and 4C.)

Re claim 30 and 45: Alcock et al. discloses light reflected by markings at said observation angles is measured after passage of said light through an optical filter [66] (see Fig. 5.)

Re claim 32 and 47: Alcock et al. discloses said illuminations having different spectral characteristics is provided by a light-emitting diode (LED) (see pg. 9 L: 12-14.)

Re claim 33 and 48: Alcock et al. discloses said illuminations having different spectral characteristics is provided by a laser diode (LD) (see pg. 9 L: 12-14 the monochromatic light serves as LD's.)

Re claim 34 and 49: Alcock et al. discloses illuminations having different spectral characteristics is provided by a light source equipped with an optical filter (see pg. 30 L: 1-4.)

Re claim 35: Alcock et al. discloses a delayed photoluminescence emission from said marking, in the UV-, the visible-, or the IR-range of the electromagnetic spectrum, is measured in addition to said viewing-angle dependent light reflection spectrum (see Figs. 4B and 4C.)

Re claim 36: Alcock et al. discloses magnetic property of the marking is measured in addition to said viewing-angle dependent light reflection spectrum (see pg. 2 L: 18-19 Light is electromagnetic radiation therefore the light reflected is electromagnetic radiation which Alcock et al. detects.)

Re claim 37: Alcock et al. discloses measured values and said previously stored corresponding reference values are obtained using the same physical device (see pg. 4 L: 16-25.)

Re claim 50: Alcock et al. discloses a programmed learning mode for determining reflected intensity values on a reference item and storing them as reference values in a digital memory, and a programmed testing mode for determining reflected intensity values on an item to be authenticated and comparing them with said previously determined and stored reference values, thereby deriving said authenticity indicator (see pg. 4 L: 17-25 the calculations preformed by the computer can be automated to run on its own so that the apparatus can be made into a smaller device.)

4. Claims 29, 31, 44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alcock et al. as modified by Plesko as applied to claims 23 and 38 above, and further in view of Schröder, Gottfried (DE 2033183, of the record.

The teachings of Alcock et al./Plesko are discussed above.

Re claim 29 and 44: Alcock et al. Alcock et al./Plesko discloses fails to teach said observation angles are collected by the means of optical fibers.

Schröder teaches observation angles collected by the means of optical fibers (see English abstract.)

It would have been obvious to one of ordinary skill in the art, at the time of invention, to have combined Alcock et al. Alcock et al./Plesko detection of printing and coating media with Schröder photoelectric detector for reading coding marks with the motivation that the fibers add to reduce size of the apparatus. Furthermore, the detectors can be housed at a different location since fibers guide light.

Re claim 31 and 46: Alcock et al. Alcock et al./Plesko discloses fails to teach optical filters which are left-or a right-handed circular polarization filter.

Schröder teaches optical filters which are left or a right handed circular polarization filter (see English abstract.)

It would have been obvious to one of ordinary skill in the art, at the time of invention, to have combined Alcock et al./Plesko detection of printing and coating media with Schröder photoelectric detector for reading coding marks with the motivation that the circular polarizer's to reduce spurious reflections. Furthermore, the polarizer's would clear up the reflected light.

Response to Arguments

5. Applicant's arguments with respect to claims 23, 24, 27-39, 42-50 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seung H. Lee whose telephone number is (571) 272-2401. The examiner can normally be reached on Monday-Friday, 7:30 AM- 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven S. Paik can be reached on (571) 272-2404. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Seung.lee@uspto.gov

/Seung H Lee/
Primary Examiner, Art Unit 2887